

**REMARKS**

Claims 1-54 remain pending and under current examination. Applicant respectfully requests reconsideration of this application in light of the following remarks.

**I. Regarding the Final Office Action**

In the Office Action<sup>1</sup>, the Examiner rejected claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,995,991 to Huang et al. ("*Huang*"); rejected claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,009,511 to Lynch et al. ("*Lynch*"); rejected claims 6-20 and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Huang*; and rejected claims 6-20 and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Lynch*.

The Office Action Summary mailed with the Office Action on June 6, 2005 indicates an objection to claim 6. However, the Office Action does not set forth any ground(s) of objection. Applicant therefore assumes this is a typographical error and respectfully requests the Examiner to indicate the objection is withdrawn in the subsequent Office Action.

Applicant respectfully traverses the Examiner's rejections for the following reasons.

---

<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

**II. Regarding the rejection of claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as being anticipated by *Huang***

Applicant respectfully traverses the rejection of claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as anticipated by *Huang*. In order to properly establish that *Huang* anticipates Applicant's claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

*Huang* does not disclose each and every element of Applicant's claimed invention. Claim 1 calls for a combination including, for example, "a second portion of the data structure having embedded status information associated with at least one status condition of the floating point operand data." *Huang* fails to teach at least this element of claim 1.

In response to reasoning submitted by Applicant in the Response mailed February 15, 2005, the Examiner asserts,

[t]he Examiner believes that each 'operand register' should have the claimed 'first portion' and 'second portion ... having embedded status' because Hwang et al teach a 'floating point device.' Therefore, the operand register should stored [sic] 'exponent portion', 'fraction portion' and embedded status information 'tag value storage portion'

(Office Action at p. 4). Applicant respectfully submits that these assertions are incorrect.

As noted above, M.P.E.P. § 2131 requires that each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. The Examiner's assertion that *Huang* "should have" the elements of claim 1 does not support a rejection under 35 U.S.C. § 102. Further, merely because *Huang* allegedly teaches a "floating point device" does not establish a proper rejection under 35 U.S.C. § 102. Rather, the Examiner must clearly articulate the manner in which *Huang* expressly or inherently teaches each and every element of claim 1.

The Examiner cites Fig. 4 of *Huang*, and the previous Office Action stating "[e]ach operand register (X or Y) has a first portion (116-1, 118-1) and second portion (116-2, 118-2)" (emphasis in original, Office Action at p. 4). Fig. 4 of *Huang* illustrates "registers 116 and 118 [have] operand value storage portion 116-1 and 118-1 and a tag value storage portion 116-2 and 118-2" (*Huang*, col. 6, line 66 through col. 7, line 2). Neither this portion nor any other portion of *Huang* teaches or suggests at least "embedded status information," as recited by claim 1. *Huang* is silent on "embedded status information," as recited by claim 1.

Accordingly, *Huang* cannot anticipate independent claim 1 and dependent claims 1-4. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by *Huang*.

With respect to independent claims 21, 27, 33, 40, 44, and 51, the Examiner merely asserts "[d]ue to the similarity of claims 21-31 and 33-54 to claims 1-5, they are rejected under a similar rationale" (Office Action mailed November 15, 2004 at p. 3). However, independent claims 21, 27, 33, 40, 44, and 51 recite elements and additional

distinctions that are not addressed by the Examiner. As M.P.E.P. § 706.02(j) instructs, “[i]t is important for an examiner to properly communicate the basis for a rejection so that the issue can be identified early and the applicant can be given a fair opportunity to reply.”

Independent claim 21 recites a combination including, for example,

a control unit in communication with the operand memory storage device, the control unit receiving at least one floating point instruction associated with the at least one floating point operation and generating at least one control signal related to the at least one floating point operation; and

a first functional processing unit in communication with the operand memory storage device and the control unit, the first functional processing unit capable processing the floating point operand and storing status information within the processed floating point operand.

The Examiner has not addressed at least these elements. *Huang* does not teach or suggest at least these elements.

As M.P.E.P. § 706.07 instructs,

In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal

(emphasis added). The Examiner has not “clearly developed” the rejection of Applicant’s claims, as the Examiner has not addressed how *Huang* teaches or suggests each and every element recited by independent claim 21 and required by dependent claims 22-26. Accordingly, Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed June 6, 2005.

Moreover, because *Huang* does not teach or suggest each and every element recited by claim 21 and required by dependent claims 22-26, no *prima facie* case of

obviousness has been established. Accordingly, Applicant respectfully request the Examiner to reconsider and withdraw the rejection of claims 21-26 under 35 U.S.C. § 102(b) as being anticipated by *Huang*.

Independent claim 27 recites a combination including, for example, “a functional processing unit ... operative to ... embed the status information within the processed floating point operand.” *Huang* does not teach or suggest at least this element.

The Examiner asserts that *Huang* teaches “[e]ach operand register (X or Y) has a first portion (116-1, 118-1) and second portion (116-2, 118-2)” (emphasis in original, Office Action at p. 4). The Examiner further asserts the claimed embedded status information is met by the “tag value storage portion” of *Huang* (Office Action at p. 4). However, “tag value storage portion” of *Huang* is not embedded “status information within the processed floating point operand.” Rather, as the Examiner asserts, the “tag portion 116-2” is in a second portion separate from the first “operand portion 116-1” (*Huang*, col. 7, lines 9-12). Accordingly, *Huang* does not teach or suggest at least “a functional processing unit ... operative to ... embed the status information within the processed floating point operand,” as recited by independent claim 27.

*Huang* thus fails to teach or suggest each and every element recited by independent claim 27 and required by dependent claims 28-32. Accordingly, *Huang* does not anticipate claims 27-32. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 27-32 under 35 U.S.C. § 102(b) as being anticipated by *Huang*.

Independent claim 33 recites a combination including, for example,

A method of encoding a floating point operand with status information without maintaining the status information in a floating point status register, comprising:

...

representing an updated status condition of the floating point operand within the floating point operand

(emphasis added). *Huang* fails to teach or suggest at least these elements.

As noted above, the Examiner asserts *Huang* teaches “[e]ach operand register (X or Y) has a first portion (116-1, 118-1) and second portion (116-2, 118-2),” and that the second portion stores a “tag value portion” (emphasis in original, Office Action at p. 4). That is, the Examiner asserts that *Huang* teaches a register with a second portion meeting the claimed “status information.” Even assuming the Examiner’s assertion is true, this does not constitute a teaching or suggestion of “encoding a floating point operand with status information without maintaining the status information in a floating point status register.”

Moreover, as discussed above with respect to independent claim 21, *Huang* fails to teach or suggest at least “representing an updated status condition of the floating point operand within the floating point operand,” as recited by independent claim 33.

*Huang* thus fails to teach or suggest each and every element recited by independent claim 33 and required by dependent claims 34-39. Accordingly, *Huang* cannot anticipate claims 33-39. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 33-39 under 35 U.S.C. § 102(b) as being anticipated by *Huang*.

Independent claims 40, 44, and 51, although of different scope, recite elements similar to elements of independent claim 37. Accordingly, independent claims 40, 44,

and 51, and dependent claims 41-43, 45-50, and 52-54, are allowable at least for the reasons discussed above. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 40-54 under 35 U.S.C. § 102(b) as being anticipated by *Huang*.

**III. Regarding the rejection of claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as being anticipated by *Lynch***

Applicant respectfully traverses the rejection of claims 1-5, 21-31, and 33-54 under 35 U.S.C. § 102(b) as being anticipated by *Lynch*. In order to properly establish that *Lynch* anticipates Applicant's claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

*Lynch* does not disclose each and every element of Applicant's claimed invention. As noted above, claim 1 calls for a combination including, for example, "a second portion of the data structure having embedded status information associated with at least one status condition of the floating point operand data." *Lynch* fails to teach at least this element of claim 1.

In response to reasoning submitted by Applicant in the Response mailed February 15, 2005, the Examiner asserts,

[t]he Examiner believes the 'register stack' should have the claimed 'first portion' and 'second portion ... having embedded status' because *Lynch*

et al teach a 'floating point device.' Therefore, the 'Register stack' should stored [siq] 'exponent portion', 'fraction portion' and embedded status information 'tag value(s)'

(emphasis added, Office Action at p. 4). Applicant respectfully submits that these assertions are incorrect.

As noted above, M.P.E.P. § 2131 requires that each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. The Examiner's assertion that *Lynch* "should have" the elements of claim 1 does not support a rejection under 35 U.S.C. § 102. Further, merely because *Lynch* allegedly teaches a "floating point device" does not establish a proper rejection under 35 U.S.C. § 102. Rather, the Examiner must clearly articulate the manner in which *Lynch* expressly or inherently teaches each and every element of claim 1.

The Examiner asserts "[t]he Register Stack (84) has a first portion (87) and a second portion (89)" (emphasis in original, Office Action at p. 4). *Lynch*'s teaching of a "tag value" does not constitute a teaching or suggestion of "a second portion of the data structure having embedded status information associated with at least one status condition of the floating point operand data" (emphasis added), as recited by claim 1.

Rather, *Lynch* teaches in col. 16, line 1 through 5,

the tag value stored in tag field 89 indicates whether the floating point register value stored in the associated register field 87 is a normal floating point number or a special floating point number.

Neither this portion of *Lynch*, nor any other portion, teaches or suggests at least "a second portion of the data structure having embedded status information associated with at least one status condition of the floating point operand data" (emphasis added),



as recited by claim 1. *Lynch* is silent on “embedded status information,” as recited by claim 1. *Lynch* thus fails to teach or suggest each and every element of claim 1.

Accordingly, *Lynch* cannot anticipate independent claim 1 and dependent claims 1-4.

Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 1-4 as being anticipated by *Lynch*.

With respect to independent claims 21, 27, 33, 40, 44, and 51, the Examiner merely asserts “[d]ue to the similarity of claims 21-31 and 33-54 to claims 1-5, they are rejected under a similar rationale” (Office Action mailed November 15, 2004 at p. 3). However, as discussed above, independent claims 21, 27, 33, 40, 44, and 51 recite elements and additional distinctions that are not addressed by the Examiner. As M.P.E.P. § 706.02(j) instructs, “[i]t is important for an examiner to properly communicate the basis for a rejection so that the issue can be identified early and the applicant can be given a fair opportunity to reply.”

As noted above, independent claim 21 recites a combination including, for example,

a control unit in communication with the operand memory storage device, the control unit receiving at least one floating point instruction associated with the at least one floating point operation and generating at least one control signal related to the at least one floating point operation; and

a first functional processing unit in communication with the operand memory storage device and the control unit, the first functional processing unit capable processing the floating point operand and storing status information within the processed floating point operand.

The Examiner has not addressed at least these elements. *Lynch* does not teach or suggest at least these elements.

As M.P.E.P. § 706.07 instructs,

In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal

(emphasis added). The Examiner has not “clearly developed” the rejection of the claims, as the Examiner has not addressed how *Lynch* teaches or suggests each and every element recited by independent claim 21 and required by dependent claims 22-26. Accordingly, Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed June 6, 2005.

Moreover, because *Lynch* does not teach or suggest each and every element recited by claim 21 and required by dependent claims 22-26, Applicant respectfully request the Examiner to reconsider and withdraw the rejection of claims 21-26.

Independent claim 27 recites a combination including, for example, “a functional processing unit ... operative to ... embed the status information within the processed floating point operand.” *Lynch* does not teach or suggest at least this element.

The Examiner asserts that *Lynch* teaches “[t]he Register Stack (84) has a first portion (87) and a second portion (89),” where portion 89 stores a tag value (emphasis in original, Office Action at p. 4) However, “tag value storage portion” of *Lynch* is not embedded “status information within the processed floating point operand,” as recited by independent claim 27. Rather, as the Examiner asserts, the “tag value” is in a second portion 89 separate from the first portion 87. Accordingly, *Lynch* does not teach or suggest at least “a functional processing unit ... operative to ... embed the status information within the processed floating point operand,” as recited by independent claim 27.

Because *Lynch* fails to teach or suggest each and every element recited by independent claim 27 and required by dependent claims 28-32, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 27-32 under 35 U.S.C. § 102(b) as being anticipated by *Lynch*.

Independent claim 33 recites a combination including, for example,

A method of encoding a floating point operand with status information without maintaining the status information in a floating point status register, comprising:

...  
representing an updated status condition of the floating point operand within the floating point operand

(emphasis added). *Lynch* fails to teach or suggest at least these elements.

As noted above, the Examiner asserts *Lynch* teaches “[t]he Register Stack (84) has a first portion (87) and a second portion (89)” (emphasis in original, Office Action at p. 4). That is, the Examiner asserts that *Lynch* teaches a register stack with a second portion meeting the claimed “status information.” Even assuming the Examiner’s assertion is true, this does not constitute a teaching or suggestion of “encoding a floating point operand with status information without maintaining the status information in a floating point status register,” as recited by independent claim 33.

Moreover, as discussed above with respect to independent claim 21, *Lynch* fails to teach or suggest at least “representing an updated status condition of the floating point operand within the floating point operand,” as recited by independent claim 33.

Because *Lynch* fails to teach or suggest each and every element recited by independent claim 33 and required by dependent claims 34-39, Applicant respectfully

requests the Examiner to reconsider and withdraw the rejection of claims 27-32 under 35 U.S.C. § 102(b) as being anticipated by *Lynch*.

Independent claims 40, 44, and 51, although of different scope, recite elements similar to elements of independent claim 37. Accordingly, independent claims 40, 44, and 51, and dependent claims 41-43, 45-50, and 52-54, are allowable at least for the reasons discussed above. Applicant therefore respectfully requests the Examiner to reconsider and withdraw the rejection of claims 40-54 under 35 U.S.C. § 102(b) as being anticipated by *Lynch*.

**IV. Regarding the rejection of claims 6-20 and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Huang***

Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 6-20 and 32 because a *prima facie* case of obviousness has not been established with respect to these claims.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

A *prima facie* case of obviousness has not been established because, among other things, *Huang* fails to teach or suggest each and every element of Applicant's claims.

Independent claim 16 recites a combination including, for example,

a first data field having sign information associated with the floating point operand;

a second data field having exponent information associated with the floating point operand; and

a third data field having fractional information associated with the floating point operand, wherein at least one of the first data field, the second data field and the third data field further includes embedded status information associated with at least one operand status condition.

First, in response to reasoning submitted by Applicant in the Response mailed February 15, 2005, the Examiner asserts,

the examiner believes that a 'floating point data' should have 'sign', 'exponent' and 'fraction' information'

(emphasis added, Office Action at p. 4). As noted above, M.P.E.P. § 2142 requires that, to establish a *prima facie* case of obviousness, each and every element of each of the claims in issue must be found in the reference(s). The Examiner's assertion that *Huang* "should have" the elements of claim 1 does not support a rejection under 35 U.S.C. § 103. The Examiner has not cited any portion of *Huang* as teaching or suggesting these features.

Second, the Examiner has not addressed the elements recited by claim 16, other than to state "Huang et al's device is a floating point device" (Office Action mailed November 15, 2004 at p. 4). The mere assertion that *Huang* teaches a floating point device does not establish a *prima facie* case of obviousness. As M.P.E.P. § 706.02(j) instructs, "[i]t is important for an examiner to properly communicate the basis for a rejection so that the issue can be identified early and the applicant can be given a fair opportunity to reply." Furthermore, as noted above, M.P.E.P. § 706.07 instructs,

In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They must also be clearly developed to

such an extent that applicant may readily judge the advisability of an appeal

(emphasis added). The Examiner has not “clearly developed” the rejection of the claims, as the Examiner has not addressed how *Huang* teaches or suggests each and every element recited by independent claim 16 and required by dependent claims 17-20. Accordingly, Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed June 6, 2005.

Moreover, *Huang* does not teach or suggest at least “a first data field having sign information,” “a second data field having exponent information,” and “a third data field having fractional information,” as recited by claim 1. Rather, the Examiner states in regard to the rejection of claim 1 under 35 U.S.C. § 102(b) that “[e]ach operand register (X or Y) has a first portion (116-1, 118-1) and second portion (116-2, 118-2),” (emphasis in original, Office Action at p. 4). This does not constitute a teaching or suggestion of a “first data field,” a “second data field,” and a “third data field,” as recited by independent claim 16.

Furthermore, as discussed above, *Huang* fails to teach or suggest at least “embedded status information,” (emphasis added) as recited by independent claim 16. Because *Huang* does not teach or suggest each and every element recited by independent claim 16 and required by dependent claims 17-20, no *prima facie* case of obviousness has been established. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 16-20 under 35 U.S.C. § 103(a) as being unpatentable over *Huang*.

Applicant respectfully renews the request in the previous Response of February 15, 2005 at pages 10 and 11 for documentary evidence supporting the Examiner's rejection. As M.P.E.P. § 2144.03(c) states "[i]f applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained." Because the Examiner has not provided any reference teaching or suggesting each and every element of Applicant's claims, Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed June 3, 2005.

In addition, Applicant notes that *Huang* is the only reference relied upon by the Examiner for this particular rejection. The M.P.E.P. sets forth that

The distinction between rejections based on 35 U.S.C. 102 and those based on 35 U.S.C. 103 should be kept in mind. Under the former, the claim is anticipated by the reference. No question of obviousness is present. In other words, for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. Whereas, in a rejection based on 35 U.S.C. 103, the reference teachings must somehow be modified in order to meet the claims. The modification must be one which would have been obvious to one of ordinary skill in the art at the time the invention was made. M.P.E.P. § 706.02(IV).

The M.P.E.P. clearly instructs that, for a proper 35 U.S.C. § 103 rejection, "the reference teachings must somehow be modified in order to meet the claims." Id. Therefore, if the Examiner applies a 35 U.S.C. § 103(a) rejection based on *Huang*, he must articulate how *Huang* must be modified to allegedly teach each and every claim element. The Examiner does not explain how or why *Huang* must be modified.

The M.P.E.P. further instructs that,

[a]fter indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification

(emphasis added, M.P.E.P. § 706.02(j)). The Examiner's rejections are not properly communicated, as the Examiner has not set forth at least "an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification" to meet the elements of Applicant's claims 6-20 and 32. Id.

Claims 6-15, 17-20, and 32 depend from independent claims 1, 16, and 27 and therefore include all of the elements recited therein. Claims 6-15, 17-20, and 32 are therefore allowable at least for the reasons discussed above. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 6-15, 17-20, and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Huang*.

Also with respect to dependent claims 6-15, 17-20, and 32, the Examiner has not addressed the elements recited by these claims, other than to make general conclusions that "the features are well known" and "obvious to a person having ordinary skill in the art" (Office Action mailed November 15, 2004 at p. 4) As M.P.E.P. § 2144.03(B) makes clear,

there must be some form of evidence in the record to support an assertion of common knowledge ... general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to



support these findings will not support an obviousness rejection. ... The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made

(internal citations omitted). Applicant respectfully submits that the Examiner's general conclusions are improper, and requests that the Examiner provide documentary evidence, supported with sound technical and scientific reasoning, teaching each and every element of Applicant's dependent claims. Because the Examiner has not properly communicated the basis for the rejection, Applicant respectfully requests the Examiner to withdraw the finality of the Office Action mailed June 3, 2005.

For at least these additional reasons, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of dependent claims 6-15, 17-20, and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Huang*.

**V. Regarding the rejection of claims 6-20 and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Lynch***

Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 6-20 and 32 because a *prima facie* case of obviousness has not been established with respect to these claims. A *prima facie* case of obviousness has not been established because, among other things, *Lynch* fails to teach or suggest each and every element of Applicant's claims.

Independent claim 16 recites a combination including, for example,

a first data field having sign information associated with the floating point operand;

a second data field having exponent information associated with the floating point operand; and

a third data field having fractional information associated with the floating point operand, wherein at least one of the first data field, the second data field and the third data field further includes embedded status information associated with at least one operand status condition.

First, in response to reasoning submitted by Applicant in the Response mailed February 15, 2005, the Examiner asserts

the examiner believes that a 'floating point data' should have 'sign', 'exponent' and 'fraction' information'

(emphasis added, Office Action at p. 4). As noted above, M.P.E.P. § 2142 requires that, to establish a *prima facie* case of obviousness, each and every element of the claims in issue must be found in the reference(s). The Examiner's assertion that *Lynch* "should have" the elements of claim 1 does not support a rejection under 35 U.S.C. § 103. The Examiner has not cited any portion of *Lynch* as teaching or suggesting these features.

Second, the Examiner has not addressed the elements recited by claim 16, other than to state "Lynch et al's device is a floating point device" (Office Action mailed November 15, 2004 at p. 4). The mere assertion that *Lynch* teaches a floating point device does not establish a *prima facie* case of obviousness. Furthermore, as noted above, the Examiner has not "clearly developed" the rejection of the claims as required by M.P.E.P. § 706.07. The Examiner has not addressed how *Lynch* teaches or suggests each and every element recited by independent claim 16 and required by dependent claims 17-20. Accordingly, Applicant respectfully requests that the Examiner withdraw the finality of the Office Action mailed June 6, 2005.

Moreover, *Lynch* does not teach or suggest at least "a first data field having sign information," "a second data field having exponent information," and "a third data

field having fractional information,” as recited by claim 1. Rather, the Examiner states with regard to the rejection of claim 1 under 35 U.S.C. § 102(b) that “[t]he Register Stack (84) has a first portion (87) and a second portion (89)” (emphasis in original, Office Action at p. 4). This does not constitute a teaching or suggestion of a “first data field,” a “second data field,” and a “third data field,” as recited by independent claim 16.

Also with respect to independent claim 16, as discussed above, *Lynch* fails to teach or suggest at least “embedded status information,” (emphasis added) as recited by independent claim 16. Because *Lynch* does not teach or suggest each and every element recited by independent claim 16 and required by dependent claims 17-20, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 16-20 under 35 U.S.C. § 103(a) as being unpatentable over *Lynch*.

Applicant respectfully renews the request in the previous Response of February 15, 2005 at pages 10 and 11 for documentary evidence supporting the Examiner’s rejection and requests the Examiner to withdraw the finality of the Office Action mailed June 6, 2005. As M.P.E.P. § 2144.03(c) states “[i]f applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.”

In addition, Applicant notes that *Lynch* is the only reference relied upon by the Examiner for this particular rejection. As discussed above, The M.P.E.P. § 706.02(IV) instructs that, for a proper 35 U.S.C. § 103 rejection, “the reference teachings must somehow be modified in order to meet the claims.” *Id.* Therefore, if the Examiner applies a 35 U.S.C. § 103(a) rejection based on *Lynch*, he must articulate how *Lynch*

must be modified to allegedly teach each and every claim element. The Examiner does not explain how or why *Lynch* must be modified.

Moreover, as noted above, the Examiner's rejections are not properly communicated, as there is no "explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification" to meet the elements of Applicant's claims 6-20 and 32. M.P.E.P. § 706.02(j).

Claims 6-15, 17-20, and 32 depend from independent claims 1, 16, and 27 and therefore include all of the elements recited therein. Claims 6-15, 17-20, and 32 are therefore allowable at least for the reasons discussed above. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 6-15, 17-20, and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Lynch*.

Also with respect to dependent claims 6-15, 17-20, and 32, the Examiner has not addressed the elements recited by these claims, other than to make general conclusions that "the features are well known" and "obvious to a person having ordinary skill in the art" (Office Action mailed November 15, 2004 at p. 4) As discussed above, Applicant respectfully submits that the Examiner's general conclusions are improper, and requests that the Examiner provide documentary evidence, supported with sound technical and scientific reasoning, teaching each and every element of Applicant's dependent claims. Because the Examiner has not properly communicated the basis for the rejection, Applicant respectfully requests the Examiner to withdraw the finality of the Office Action mailed June 3, 2005.

For at least these additional reasons, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of dependent claims 6-15, 17-20, and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Lynch*.

#### IV. Conclusion

Applicant respectfully requests that the Examiner respond to each and every point raised in this Request for Reconsideration if the rejections are to be maintained. See M.P.E.P. § 706.07(f)(III)(K).

In view of the foregoing remarks, Applicant submits that this claimed invention, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: August 4, 2005

By: Nathan A. Sloan  
Nathan A. Sloan  
Reg. No. 56,249